1. A cell or tissue collection medium, wherein the cells or tissue contained in the medium can be analyzed directly by both cytological and molecular methods, wherein the molecular method of analysis comprises either RNA or DNA or protein analysis or the analysis of both RNA and DNA, and wherein the medium is water based and comprises a preservative, a cross-linking agent and an anti-degradation agent, and wherein the cross-linking agent is an aldehyde comprising about 1% to about 15% of the medium.

2. The medium of claim 1, wherein the medium consists of a volume of less than 10 ml.

3. The medium of claim 1, wherein the medium consists of a volume of less than about 5 ml.

4. The medium of claim 1, where in the medium consists of a volume of less than about 2 ml.

5. The medium of claim 1 wherein the medium comprises a buffer component, at least one alcohol component, a cross-linking agent and an agent to inhibit degradation of at least one of the group consisting of RNA, DNA, and protein.

6. The medium of claim 5, wherein the buffer component has a buffering capacity within a pH range of about 2.5 to about 6.

7. The medium of claim 6, wherein the buffer component has a buffering capacity within a pH range of about 3 to about 5.

8. The medium of claim 7, wherein the buffer component has a buffering capacity within a pH range of about 3.5 to about 4.5.

9. The medium of claim 5, wherein the alcohol component comprises a C1 to

C10 alcohol.

10. The medium of claim 9, wherein the alcohol component is selected from the group consisting of methanol, ethanol, propanols, butanols, and pentanols.

11. The medium of claim 10, wherein the alcohol component comprises ethanol or n-butanol.

13. The medium of claim 5, wherein the cross-linking agent is selected from the group consisting of formaldehyde and glutaraldehyde.

14. The medium of claim 13, wherein the cross-linking agent comprises glutaraldehyde-bisulfite.

15. The medium of claim 5, wherein the agent to inhibit degradation of at least one of the group consisting of RNA, DNA, and protein comprises at least one agent selected from the group consisting of a nuclease inhibitor, a protease inhibitor and a chelating agent.

16. The medium of claim 15, wherein the agent to inhibit degradation of at least one of the group consisting of RNA, DNA, and protein comprises a chelating agent.

17. The medium of claim 15, wherein the chelating agent is selected from the group consisting of murexide, chromotropic acid, 1-(1-hydroxy-2-napththylazo-2-hydroxy-5-nitronaphthalene-4-sulphonic acid, EDTA (ethylenediaminetetraacetic acid), *o*-phenanthroline, and thiourea.

18. The medium of claim 15, wherein the chelating agent comprises EDTA (ethylenediaminetetraacetic acid).

19. A method of performing morphological and biochemical analysis on a cell

or tissue, wherein the method comprises:

obtaining cells or tissues from a patient;

preserving the cells or tissue in a water-based medium comprising a preservative, a cross-linking agent and an anti-degradation agent, and wherein the cross-linking agent is an aldehyde comprising about 1% to about 15% of the medium;

directly analyzing the morphology of the cells or tissue preserved in the medium; and

directly analyzing RNA or DNA or protein contained in the cells or tissue preserved in the medium.

20. A collection medium comprising water, a preserving agent, a buffer, a cross-linking agent and an agent capable of inhibiting the degradation of at least one of the group consisting of RNA, DNA, and protein, wherein the cross-linking agent is an aldehyde comprising about 1% to about 15% of the medium.

21. An article of manufacture for preserving a cell sample of limited cell number comprising:

a container holding the medium according to claim 20 and wherein the volume of the medium is less than 2 ml; and

a lid fitting said container.

22. The article of manufacture of claim 21 further comprising a cell collecting device having an elongated member wherein a distal end of the elongated member has a non-absorbent increased surface area.

23. The article of manufacture of claim 22 wherein the distal end of the elongated member is a brush.

24. A method of cell sample collection that allows detection of cell

morphology and quantitative analysis of at least one of the group consisting of RNA, DNA, and protein from a single sample, said method comprising

collecting cells from a patient wherein the cell sample is limited in size;

storing collected cells in the medium according to claim 20;

removing an aliquot of cells in the medium for cell morphology analysis; and

removing a second aliquot of cells in the medium for a quantitative analysis selected from the group consisting of DNA analysis, RNA analysis, protein analysis and carbohydrate analysis.

25. The method of claim 24, wherein the cells are stored in a sample of less than 10 ml.

26. The method of claim 24, wherein the cells are stored in a sample of less than about 5 ml.

27. The method of claim 24, wherein the cells are stored in a sample of less than about 2 ml.

28. The article of manufacture according to claim 21, wherein the article of manufacture comprises a container holding a cell-containing medium according to claims 20.

Please add the following claims.

29. The method of claim 19, wherein the cross-linking agent is selected from the group consisting of formaldehyde and glutaraldehyde.

30. The medium of claim 20, wherein the cross-linking agent is selected from the group consisting of formaldehyde and glutaraldehyde.

31. The article of claim 21, wherein the cross-linking agent is selected from the group consisting of formaldehyde and glutaraldehyde.

32. The method of claim 24, wherein the cross-linking agent is selected from the group consisting of formaldehyde and glutaraldehyde.

33. The medium of claim 1, wherein the cross-linking agent comprises about 1% to about 5% of the medium.

34. The method of claim 19, wherein the cross-linking agent comprises about 1% to about 5% of the medium.

35. The medium of claim 20, wherein the cross-linking agent comprises about 1% to about 5% of the medium.

## REMARKS

Applicants have amended independent claims 1, 19, and 20 to include the recitation "wherein the cross-linking agent is an aldehyde comprising between about 1% and about 15% of the medium." Support for the amendment is found in original claim 12 and at page 9, lines 5-15 of the specification. Support for new claims 29 through 35 is found throughout the specification, for example, page 9, lines 5-15 of the specification. Applicants assert that these claim amendments overcome both the double patenting and prior art rejections. No new matter is introduced by the amendment and entry thereof is respectfully requested.

Response to Double Patenting Rejection

Claims 1-11 and 15-19 were provisionally rejected under 35 U.S.C. § 101 and claims 20-27 were provisionally rejected under the judicially created doctrine of obviousness-